



Lucas County/UT Business Waste Reduction Assistance Program

Our Mission Statement: Our mission is to help organizations in Lucas County enhance sustainability through cost effective engineering methods and outstanding service while educating students in the systems approach of engineering, environmental awareness, and professional development.

Program Overview:

The Business Waste Reduction Assistance Program is a unique partnership between the Lucas County Solid Waste Management District, The University of Toledo's College of Engineering, and local business and industry. Formed in July 1996, we provide no cost solid waste, energy, and greenhouse gas assessments to Lucas County commercial and industrial businesses.

Goals of the Project:

As a program of the county and the university, the major goal of the project is to provide a valuable service to the community. The knowledge and expertise of the University's faculty, staff and students are utilized to identify environmentally friendly solutions and cost savings for local businesses through waste minimization and process efficiency solutions. The following goals are achieved:

- Increased manufacturing competitiveness through reduced solid waste disposal costs, reduced energy costs, and optimized use of raw materials, packaging and floor space
- Improved corporate image as the companies become more green
- Reduced pollution through reduced energy usage, and the application of clean and renewable energy sources
- Decreased reliance on landfills for disposal and fossil fuels for energy

Expertise, Strategies, and Technologies applied by the Program:

- Six sigma process analysis
- Cost analysis, forecasting, and business justification for environmental projects
- Zero landfill implementation
- Recycling
- Material separation and recovery
- Scrap and defect minimization
- Waste exchanges
- Transportation network optimization
- Composting

- Equipment selection and installation (including balers, shredders, grinders, material handling, and anaerobic digesters)
- Waste-to-energy conversion
- Greenhouse gas and carbon footprint analyses
- Life cycle analysis
- Solar cells
- Geothermal
- Wind turbines
- High efficiency lighting

Program Results

- Over 90 no cost waste assessments for local business and government buildings have been conducted since 1996
- Over 110,000 tons of annual recyclable waste have been identified for reduction, reuse, or recycling
- Over \$3.1 million in annual cost savings have been identified for Lucas County businesses